
एडिफेनफोस एमुल्सिफिएबल
कॉन्सेंट्रेट्स – विशिष्टि
(पहला पुनरीक्षण)

**Edifenphos Emulsifiable
Concentrates — Specification**
(*First Revision*)

ICS 65.100.30

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FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Pesticides Sectional Committee had been approved by the Food and Agriculture Divisional Council.

Edifenphos emulsifiable concentrates are largely used as fungicide on agricultural crops.

Edifenphos emulsifiable concentrate formulation is generally manufactured to contain 50 percent (*m/m*) of edifenphos content.

This standard was first published in 1978. In this revision, the standard has been brought out in the latest style and format of the Indian Standards. It also incorporates two amendments issued to this standard.

In the preparation of this standard due consideration has been given to the provisions of the *Insecticides Act*, 1968 and the Rules framed thereunder. However, this standard is subject to the restrictions imposed under these, wherever applicable.

The composition of the Committee responsible for the formulation of this standard is given in Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

EDIFENPHOS EMULSIFIABLE CONCENTRATES — SPECIFICATION

(First Revision)

1 SCOPE

This standard prescribes the requirements and methods of sampling and test for edifenphos emulsifiable concentrates.

2 REFERENCES

The standards, given below contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards.

<i>IS No.</i>	<i>Title</i>
IS 1448 (Part 20) : 2019	Methods of test for petroleum and its products [p : 20] Determination of flash point - Abel closed - Cup method (<i>third Revision</i>)
IS 6940 : 1982	Methods of test for pesticides and their formulations (<i>first revision</i>)
IS 8190 (Part 2) : 1988	Requirements for packing of pesticides Part 2 Liquid pesticides (<i>second revision</i>)
IS 8954 : 2022	Specification for edifenphos technical (<i>first revision</i>)
IS 10627 : 1983	Methods for sampling of pesticidal formulations

3 REQUIREMENTS

3.1 Constituents

The material shall consist of edifenphos technical dissolved in suitable solvent(s), together with emulsifying agent(s), and with or without stabilizer(s).

3.1.1 Edifenphos, technical, employed in the manufacture of this material shall conform to IS 8954.

3.2 Physical

The material shall comply with the physical requirements specified in **3.2.1** to **3.2.4**.

3.2.1 Description

The material shall consist of technical edifenphos dissolved in a suitable solvent, with an emulsifying agent or agents added, and shall be in the form of a stable liquid free from extraneous impurities.

3.2.2 Cold Test

No turbidity or separation of solid or oily matter or both shall occur when the material is subjected to the cold test at 10 °C as prescribed in IS 6940 or any other lower temperature as agreed to between the purchaser and the vendor. Seedling crystal is not necessary.

3.2.3 Flash Point (Abel)

When determined by the method prescribed in IS 1448 (Part 20), the flash point of the material shall be above 24.5 °C.

3.2.4 Emulsion Stability

Any separation, including creaming at the top and sedimentation at the bottom, of 100 ml of emulsion prepared in standard hard water with 5 ml for public health use and 2 ml for agricultural use shall not exceed 2 ml when tested by one of the methods prescribed in IS 6940.

3.3 Chemical

The material shall comply with the chemical requirements, specified in **3.3.1** and **3.3.2**.

3.3.1 Edifenphos Content

When determined by the method prescribed in Annex A of IS 8954, the observed edifenphos content, percent (*m/m*), of any of the samples shall not differ from the nominal value by more than the

percent tolerance applied to the declared nominal value as given below:

<i>Nominal Value, percent</i>	<i>Tolerance, percent</i>	
Up to 9	+10 -5	} of the nominal value
Above 9 and below 50	±5	
50 and above	+5 -3	

3.3.1.1 The actual value of the edifenphos content in the formulations shall be calculated to the second decimal place for rounding off to the first decimal place before applying the tolerances given in **3.3.1**.

3.3.2 Acidity or Alkalinity

When tested by the method prescribed in IS 6940, the acidity (as H_2SO_4), or alkalinity (as NaOH) of the material shall be not more than 1.0 percent and 0.2 percent respectively.

4 PACKING

The material shall be packed in clean and dry containers made of mild steel suitably and properly lacquered from inside. Aluminium containers may also be used. The containers shall also comply with general requirements as stipulated in **2** of IS 8190 (Part 2).

5 MARKING

5.1 The containers shall be securely closed and shall be bear legibly and indelibly the following information:

- Name of the material;
- Name and address of the manufacturer;
- Batch number;
- Date of manufacture;
- Date of expiry;
- Net quantity;
- Nominal edifenphos content, percent (m/m);
- Cautionary notice as worded in the *Insecticides Act*, 1968, and Rules framed thereunder; and
- Any other information required under the

Legal Metrology (Packaged Commodities) Rules, 2011.

5.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

6 SAMPLING

When freshly manufactured material in bulk quantity is offered for inspection, representative samples of the material shall be drawn and tested as prescribed in IS 10627 within 90 days of its manufacture. When the material is offered for inspection after 90 days of its manufacture, sampling shall be done as prescribed in IS 10627. However, the criteria for conformity of the material when tested, shall be the limits of tolerances, as applicable over the declared nominal value and given under clause **3.3.1** of the standard.

7 TESTS

7.1 Tests shall be carried out by the appropriate methods referred to in **3.2.2** to **3.2.4**, **3.3.1** and **3.3.2**.

7.2 Quality of Reagents

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

ANNEX A
(Foreword)

COMMITTEE COMPOSITION

Pesticides Sectional Committee, FAD 01

<i>Organization</i>	<i>Representative(s)</i>
Directorate of Plant Protection Quarantine and Storage, Faridabad	DR RAVI PRAKASH (<i>Chairperson</i>)
All India Biotech Association, New Delhi	SHRI SAURABH SINGHAL SHRI SHAH JI DHAR (<i>Alternate</i>)
Central Insecticide Board and Registration Committee, Faridabad	SECRETARY DR VANDANA SETH (<i>Alternate</i>)
Central Insecticide Laboratory, Faridabad	DR ARCHANA SINHA SHRI SUBHASH CHAUDHARY (<i>Alternate</i>)
Consumer Guidance Society of India, Mumbai	SHRI SITARAM DIXIT DR M. S. KAMATH (<i>Alternate</i>)
Crop Care Federation of India, New Delhi	DR J. C. MAJUMDAR
Crop Life India, New Delhi	SHRI ASITAVA SEN MS NIRUPAMA SHARMA (<i>Alternate</i>)
CSIR-Indian Institute of Toxicology Research, Lucknow	DIRECTOR DR SHEELENDRA P. SINGH
FMC India Pvt. Limited, Bengaluru	SHRI CHIRAG PATEL
Food Safety and Standards Authority of India, New Delhi	ADVISOR (STANDARDS)
IDMA Laboratories Limited, Chandigarh	DR INDRA RAI
Indian Agricultural Research Institute, New Delhi	DIRECTOR
Indian Institute of Packaging, Mumbai	DR TANWEER ALAM
Indian Pest Control Association, New Delhi	SHRI UDAYAN GHOSH
Institute of Pesticide Formulation Technology, Gurgaon	DR M. VAIRAMANI
Ministry of Agriculture, Department of Agriculture, Chennai	JOINT DIRECTOR OF AGRICULTURE (RES) DEPUTY DIRECTOR LAB (<i>Alternate</i>)
National Centre for Integrated Pest Management, New Delhi	DR SUMITRA ARORA
National Institute of Plant Health Management, Hyderabad	DR MAHESH SAINI MS T. SRIDEVI (<i>Alternate</i>)
Pesticide Manufacturers and Formulators Association of India (PMFAI), Mumbai	DR ARCHANA SRIVASTAVA DR UDAY KUMAR (<i>Alternate</i>)
Regional Pesticides Testing Laboratory, Chandigarh	SHRI V. VASU

<i>Organization</i>	<i>Representative(s)</i>
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In Personal Capacity (263, Sector 28, Faridabad – 121008)	SHRI VIPIN SAINI
BIS Directorate General	SHRIMATI SUNEETI TOTEJA, SCIENTIST 'E'/ DIRECTOR AND HEAD (FOOD AND AGRICULTURE DEPARTMENT) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

Member Secretary
SHRI KULDEEP MITTAL
SCIENTIST 'B'/ASSISTANT DIRECTOR
(FOOD AND AGRICULTURE DEPARTMENT), BIS

Bureau of Indian Standards

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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